Mr. Edward Nguyen
ANR Pipeline Company - St. John Compressor Station
500 Renaissance Center, RC 612
Detroit, MI 48243

Re: 089-11347
First Significant Source Modification to:
Part 70 permit No.: T089-6245-00069

Dear Mr. Nguyen:

ANR Pipeline Company was issued Part 70 operating permit T089-6245-00069 on November 12, 1998 for the St. John Compressor Station in St. John, Indiana. An application to modify the source was received on September 9, 1999. Pursuant to 326 IAC 2-7-10.5(f) the following modification is approved:

The operating status of the existing emergency generator, installed in 1995, identified as ID # G08 with a capacity of 825 Horsepower and exhausting to stack #S08, shall be changed to an intermittent use generator, operating for 3,000 or less hours per year.

The following conditions are applicable to the proposed project:

General Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Management (OAM).

2. This approval to modify does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. All requirements and conditions of this approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

5. Pursuant to 326 IAC 2-7-10.5(l) the modification to the emission unit under this approval

shall not be made prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

Administrative Amendment 089-11359-00069 will incorporate this source modification and the federally enforceable limit of 3,000 hours of operation per year into ANR Pipeline Company's Part 70 Permit.

The proposed operating conditions applicable to these emission units are attached to this First Significant Source Modification approval. The source must comply with the requirements of 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12 before operation of any of the proposed emission units can begin.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Rachel Meredith or extension (3-5691), or dial (317) 233-5691.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
RLM
cc: File - Lake County
U.S. EPA, Region V
Lake County Health Department
Northwest Regional Office
Air Compliance Section Inspector - Ramesh Tejuji
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for a Significant Source Modification to a Part 70 Operating Permit

Source Background and Description

Source Name:	ANR Pipeline Company
Source Location:	10313 White Oak Avenue, St. John, IN 46373
County:	Lake
SIC Code:	4922
Operation Permit No.:	T089-6245-00069
Source Modification:	089-11347-00069
Modification Reviewer:	Rachel Meredith Michele Williams (for Emission Offset Review)

The Office of Air Management (OAM) has reviewed an application for a source modification to a Part 70 permit from ANR Pipeline Company. The application by ANR Pipeline Company seeks to change the designation of the 825 horsepower natural gas emergency use generator, identified as ID# G08, to an intermittent use generator operating for 3,000 or less hours per year. This modification is being requested to secure emergency power for ANR Pipeline Company pursuant to a request from the company's local utility service that interruptible serve be accepted in order to avoid utility brown outs in the area.

Existing Approvals

The source was issued a Part 70 Operating Permit, No. 089-6245-00069, on November 12, 1998. No further approvals have been issued for this source since issuance of the Part 70 Operating Permit.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the First Significant Source Modification to the Part 70 Operating Permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 source modification application for the purposes of this review was received on September 9, 1999.

County Attainment Status

The source is located in Lake County.

Pollutant	Status
TSP	Attainment

PM-10	Attainment
SO_2	Attainment
NO_2	Attainment
Ozone	Severe Nonattainment
CO	Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as nonattainment for ozone.

Source Status

Because ANR Pipeline Company's potential to emit VOC and NOx is greater than 25 tons per year and the source is located in a county designated as severe non-attainment for ozone, ANR Pipeline Company is a Major Source under 326 IAC 2-7 and 326 IAC 2-3 (Emission Offset). The following table reflects ANR Pipeline Company's existing potential to emit before modification.

Pollutant	Potential Emissions (tons/year)
PM	less than 100
PM-10	less than 100
SO_2	less than 100
VOC	greater than 250
CO	greater than 250
NO_x	greater than 250

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
Xylene	less than 10
Toluene	less than 10
Hexane	less than 10
Formaldehyde	greater than 10
Benzene	less than 10
Ethylbenzene	less than 10
TOTAL	less than 25

Potential To Emit of the Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

The following tables reflect the potential to emit from the 825 horsepower natural gas generator based on 8,760 hours of operation per year.

Pollutant	Potential Emissions (tons/year)
PM	0.3
PM-10	0.3
SO_2	0.02
VOC	3.0

CO	10.3
NO_x	73.1

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
Mercury	2.98541E-04

See Page 1 of 2 Appendix A for detailed calculations.

Justification for Modification

The potential to emit from this source modification as defined in 326 IAC 2-1.1-1(16) NOx is equal to or greater than 25 tons per year. Therefore, the source is being modified through a significant source modification pursuant to the requirements of 326 IAC 2-7-10.5(f)(4). This source modification will only allow the source to construct. Administrative Amendment 089-11359-00069 will allow the source to operate the 825 horsepower natural gas generator up to the federally enforceable limit of 3,000 hours per twelve (12) consecutive month period.

Potential to Emit of Modification After Issuance

The source is requesting that the emergency generator be reclassified as an intermittent use generator to supply emergency power during times of service interruption from the source's local utility provider. The source estimates that the use of the generator as an emergency power supply will be limited to 3,000 hours or less per year. The following table shows the limited PTE from this source modification based on the enforceable limit of 3,000 hours or less per year of operation of the generator.

Pollutant	PM [1]	PM_{10} [1]	SO_2 [1]	CO [2]	VOC [3,4]	NO_x [3,4,5]
	tons/year					
Proposed Modification:						
825 HP Generator	0.1	0.1	0.01	3.5	1.0	25.0
Source Modification Project	0.1	0.1	0.01	3.5	1.0	25.0
Contemp Increases (None)	---	---	---	---	—	---
Contemp Decreases (None)	---	---	---	---	---	---
Net Emissions	0.1	0.1	0.01	3.5	1.0	25.0
PSD Significant Level	---	---	---	100	---	40 (NO_x)
Emission Offset Significant Level	25	15	40	---	25	25 (NO_x)

[1] The source modification project for PM, PM_{10} and SO_2 does not exceed its emission offset significant levels; therefore, contemporaneous emissions netting is not required for these pollutants

[2] The proposed modification for CO does not exceed its PSD significant level; therefore, contemporaneous emissions netting is not required

[3] The source modification project for ozone (NOx and VOC) exceeds zero; therefore, netting of all contemporaneous increases is required

[4] The contemporaneous decreases are not evaluated for ozone because it is a severe nonattainment pollutant

[5] NOx as NO2 is subject to PSD requirements pursuant to 326 IAC 2-2 and NOx as a precursor of ozone is subject to emission offset requirements pursuant to 326 IAC 2-3

(a) A federally enforceable limit of 3,000 hours of operation per year shall be required on the 825 HP generator to avoid the PSD (326 IAC 2-2 and 40 CFR 52.21) and emission offset (326 IAC 2-3) requirements.

(b) This proposed modification to an existing Major PSD Source, as defined in 326 IAC 2-2-1 (PSD Definitions), is not major for CO because the limited emissions of this attainment pollutant from the proposed modification is less than its PSD significant level. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

(c) This proposed modification to an existing Major Stationary Source, as defined in 326 IAC 2-3-1 (Emission Offset Definitions), is not major for PM, PM_{10} and SO_2 because the limited emissions of each of these nonattainment pollutants from the source modification project is less than its emission offset significant level (see the definition of "Significant" pursuant to 326 IAC 2-3-1(y)). Therefore, pursuant to 326 IAC 2-3, the emission offset requirements do not apply.

(d) This proposed modification to an existing "Major Stationary Source", as defined in 326 IAC 2-3-1 (Emission Offset Definitions), is not major for ozone (NOx and VOC), a severe nonattainment pollutant, because the sum of the NOx and VOC emission increases from the source modification project and all other NOx and VOC increases from the source over a five consecutive calendar year period prior to, and including, the year of the modification does not exceed its emission offset significant level (see the definitions of "Net Emissions Increase", "De Minimis", and "Significant" pursuant to 326 IAC 2-3-1(t), 326 IAC 2-3-1(j), and 326 IAC 2-3-1(y), respectively). Therefore, pursuant to 326 IAC 2-3, the emission offset requirements do not apply.

See Page 2 of 2 Appendix A for detailed emissions calculations for the 825 horsepower generator based on 3,000 hours of operation per year.

Federal Rule Applicability

There are no New Source Performance Standards [(326 IAC 12), 40 CFR 60] or National Emission Standards for Hazardous Air Pollutants [(NESHAPs), 40 CFR 63] applicable to the 825 horsepower natural gas generator.

State Rule Applicability - Entire Source

326 IAC 2-3 Emission Offset

The hours of operation of the 825 HP intermittent use natural gas generator shall not exceed 3,000 hours per twelve (12) consecutive month period. Therefore, pursuant to 326 IAC 2-3, the emission offset requirements do not apply. Any change or modification which may increase the potential emissions to 25 tons per year of NOx must be approved by the Office of Air Management before any such change may occur.

Compliance Requirements

326 IAC 2-7-5(3) Record Keeping Requirements

To document compliance with the 3,000 hour per year limit on the hours of operation for the 825 HP intermittent use generator, the source shall maintain a log of the hours the generator is in use.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

(a) The 825 HP natural gas generator at its 3,000 hour per year limit will emit levels of air toxics less than 10 tons per year for a single pollutant and 25 tons per year for any combination of pollutants.

Conclusion

The operation of the intermittent use generator shall be subject to the conditions of the attached proposed **First Significant Source Modification No. T089-11347-00069.**

Appendix A: Emissions Calculations
Industrial Natural Gas Reciprocating Engine

Company Name: ANR Pipeline Company - St. John Compressor Station
Address, City IN Zip: 10313 White Oak Avenue, St. John, IN 46373
Operating Permit: 089-6245-00069
Source Modification: 089-11347-00069
Reviewer: Rachel Meredith
Date 09/27/99

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year
6	375.4285714

		Pollutant				
	PM-10	PM	SO2	NOx	VOC	CO
Emission Factor in lb/MMBtu	0.01	0.01	5.88E-04	2.8	0.11	0.4
Potential to Emit in tons/yr	0.3	0.3	0.02	73.1	3.0	10.3

Methodology

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from Fire 6.21 (SCC 2-03-002-01) 05/99
Emission (tons/yr) = Heat input (MMBtu/hr) x Emission Factor (lb/MMBtu) * 8760 hr/yr /2,000 lb/ton

HAPs

	Mercury
Emission Factor in lb/MMBtu	1.14E-05
Potential to Emit in tons/yr	2.98541E-04

Methodology

Emission Factors are from Fire 6.21 (SCC 2-03-002-01) 05/99
Emission (tons/yr) = Heat input (MMBtu/hr) x Emission Factor (lb/MMBtu) * 8760 hr/yr /2,000 lb/ton

Appendix A: Emissions Calculations
Industrial Natural Gas Reciprocating Engine
Limited PTE Based on 3,000 Hours of Operation Per Year

Company Name: ANR Pipeline Company - St. John Compressor Station
Address, City IN Zip: 10313 White Oak Avenue, St. John, IN 46373
Operating Permit: 089-6245-00069
Source Modification: 089-11347-00069
Reviewer: Rachel Meredith
Date 09/27/99

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year
6	128.5714286

		Pollutant				
	PM-10	PM	SO2	NOx	VOC	CO
Emission Factor in lb/MMBtu	0.01	0.01	5.88E-04	2.8	0.11	0.4
Potential to Emit in tons/yr	0.1	0.1	0.01	25.0	1.0	3.5

Methodology

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 3,000 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from Fire 6.21 (SCC 2-03-002-01) 05/99
Emission (tons/yr) = Heat input (MMBtu/hr) x Emission Factor (lb/MMBtu) * 3,000 hr/yr /2,000 lb/ton

HAPs

	Mercury
Emission Factor in lb/MMBtu	1.14E-05
Potential to Emit in tons/yr	1.02240E-04

Methodology

Emission Factors are from Fire 6.21 (SCC 2-03-002-01) 05/99
Emission (tons/yr) = Heat input (MMBtu/hr) x Emission Factor (lb/MMBtu) * 3,000 hr/yr /2,000 lb/ton